

**IN THE UNITED STATES DISTRICT COURT FOR  
THE SOUTHERN DISTRICT OF WEST VIRGINIA**

**HUNTINGTON DIVISION**

OHIO VALLEY ENVIRONMENTAL  
COALITION, INC., and WEST  
VIRGINIA HIGHLANDS  
CONSERVANCY, INC.,

Plaintiffs,

v.

CIVIL ACTION NOS. 3:07-0413 &  
3:08-0088 &  
3:09-01167

APOGEE COAL COMPANY, LLC, and  
HOBET MINING, LLC,

Defendants.

**MEMORANDUM OPINION AND ORDER**

Pending before the Court are Apogee Coal Company, LLC (“Apogee”) and Hobet Mining LLC’s (“Hobet”)<sup>1</sup> motions to modify the consent decrees (Docs. 149 & 61) in civil actions 3:07-cv-0413 and 3:08-cv-0088, respectively; Plaintiffs’ motion for contempt (Doc. 156) in 3:07-cv-0413; and the scope and terms of injunctive relief in 3:09-cv-01167. A trial on the motions was held from August 9, 2010, until August 12, 2010. After trial, the parties represented that they were close to resolving the matter and requested a stay of closing arguments and ruling, in order to allow the parties to continue negotiations. The Court continued the argument, as requested. Over the next three weeks, the Court consulted with the parties on the status of their negotiations on several occasions. The parties represented that a settlement in principal had been reached and requested

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<sup>1</sup> Both Apogee and Hobet are owned and operated by the same parent company, Patriot Coal Corporation (“Patriot Coal”). Apogee was acquired when Patriot purchased properties from Magnum Coal Company in 2009. Patriot has acted in behalf of Apogee throughout this case.

time to negotiate a joint consent decree. Further continuance was granted.

Unfortunately, on August 31, 2010, the parties informed the Court that the negotiations had deteriorated and they were no longer in agreement on any issues. Accordingly, closing arguments were held on August 31, 2010, on the motions and on the scope and terms of injunctive relief, and, following argument, the Court **GRANTED** Plaintiffs' motion for contempt and **DENIED** Defendants' motions to modify. On September 1, 2010, the Court entered an Order memorializing its bench rulings. Now, the Court provides the following Memorandum Opinion and Order with reasons and authority supporting its August 31, 2010, decisions. As to Defendant Hobet's motion to modify in 3:08-0088, it is hereby **DENIED** as moot as Defendant has no further obligations under the Consent Decree in that action and Plaintiffs have not contended that Defendant should be held in contempt for failing to comply. The Court has entered contemporaneously with this Memorandum Opinion and Order orders specifying relief in civil actions 3:07-413 and 3:09-1167, the latter of which addresses the scope and terms of injunctive relief in that action. The remainder of this Memorandum Opinion and Order addresses solely the motions pending in 3:07-413 and 3:08-0088.

### **Background**

Both *Ohio Valley Environmental Coalition, Inc. v. Apogee Coal Company, LLC* ("Apogee") (3:07-cv-0413) and *Ohio Valley Environmental Coalition, Inc. v. Hobet Mining, LLC* ("Hobet I") (3:08-cv-0088) are citizen suits brought pursuant to 33 U.S.C. § 1365, the citizen suit provision of the Clean Water Act ("CWA"), and 30 U.S.C. § 1270, the citizen suit provision of the Surface Mine

Control and Reclamation Act (“SMCRA”).<sup>2</sup> Plaintiffs, two environmental groups suing on behalf of their members, sought declaratory judgment and injunctive relief for violations of: (1) the effluent limitations for selenium contained in certain West Virginia/National Pollution Discharge Elimination System (“WV/NPDES”) permits, and (2) the performance standards contained in the related surface mining permits held by Defendants. The procedural history of each case is complicated.<sup>3</sup> However, the underlying purposes of the cases were identical—to require compliance

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<sup>2</sup> Under the CWA and SMCRA, “[t]he citizen-suit provision is a critical component of the [statutory] enforcement scheme, as it permits citizens to abate pollution when the government cannot or will not command compliance.” *Env’tl. Conservation Org. v. City of Dallas* (“*City of Dallas*”), 529 F.3d 519, 526 (5th Cir. 2008) (citing *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found.* (“*Gwaltney*”), 484 U.S. 49, 62 (1987)) (internal quotations omitted); *see also Piney Run Pres. Ass’n v. County Comm’rs of Carroll County, Md.* (“*Piney Run II*”), 523 F.3d 453, 456 (4th Cir. 2008). “It reflects Congress’s recognition that ‘(c)itizens can be a useful instrument for detecting violations and bringing them to the attention of the enforcement agencies and courts alike.” *Natural Res. Def. Council v. Train*, 510 F.2d 692, 699–700 (D.C. Cir. 1974) (citing S. Rep. No. 1196, 36-38 (1970)) (other citations omitted).

<sup>3</sup> When filed, on June 29, 2007, the *Apogee* complaint sought declaratory judgment and injunctive relief for violations of the selenium limits contained in six WV/NPDES Permits: (1) one WV/NPDES permit held by Apogee (WV/NPDES Permit 1013599); and (2) five WV/NPDES permits held by Hobet (WV/NPDES Permits 1020889, 1021028, 1017225, 1016776, and 0099392). On July 18, 2007, Plaintiffs voluntarily dismissed the claims related to WV/NPDES Permits 0099392, 1016776, 1020889 and 1021028, in response to a State enforcement action in the Boone County Circuit Court. Claims related to WV/NPDES Permit 1017225 were then dismissed, on March 10, 2008, by joint motion, apparently because Hobet was in compliance with that permit. Accordingly, after March 10, 2008, the only claims remaining in *Apogee* were those related to WV/NPDES Permit 1013599. Plaintiffs filed *Hobet I* on February 7, 2008. The case is, effectively, a continuance of *Apogee*. In *Hobet I*, Plaintiffs reasserted their claims related to violations of the selenium limits in WV/NPDES Permits 0099392, 1016776, 1020889, and 1021028 (the four Hobet permits dismissed from *Apogee* on July 18, 2007) and the associated surface mining permits. Plaintiffs re-alleged the claims on the grounds that the Boone County action, which had laid dormant for more than a year at the time of filing, failed to qualify as a diligent prosecution under the CWA. Initially, this Court agreed, finding it had jurisdiction to hear *Hobet I* at the time of filing. Jurisdiction was short lived, however, because, following the filing of *Hobet I*, the West Virginia Department of Environmental Protection (“WVDEP”) entered into a consent decree in the Boone County action which rendered the majority of Plaintiffs’ claims moot.

with the companies' effluent limits for selenium as soon as feasible—and the cases were resolved, jointly, by consent decree on March 19, 2009. *See* Docs. 142 & 54.

*I. Selenium*

Selenium is a naturally occurring element, common in the environment. It is problematic only in high concentrations, but at certain levels has toxic effects. Selenium impacts the reproductive cycle of many aquatic species, can impair the development and survival of fish, and can damage gills or other organs of aquatic organisms subjected to prolonged exposure. It can also be toxic to humans, causing kidney and liver damage, and damage to the nervous and circulatory systems.

Federal and state regulators have recognized the toxic nature of selenium for some time (the first water quality standards were effective in 1987) but they did not identify it as a problem related to surface mining until 2003. As it turns out, surface mining activities can increase the concentration of selenium in the environment by exposing selenium bearing rock and soil to weathering processes. Selenium leaches out of the exposed material and is carried by surface runoff to downstream lakes, reservoirs, and waterways.

The first effluent limits for selenium contained in surface mining permits did not become effective until November 2006. Regulatory and enforcement actions related to selenium are, therefore, relatively new in West Virginia, and selenium-related enforcement actions often present novel questions for regulatory agencies and for the courts. One of the novel, and difficult, issues raised by selenium-related enforcement actions is the uncertainty surrounding treatment technology. As the parties and their experts agreed at trial, the development of technology for the capture and removal of selenium at surface mine sites is in the pilot stage. It requires the adaptation of an

existing waste water treatment system or process to the surface mining context. As a result, to date, no technology has proven successful at full scale. The process of developing a treatment technology capable of reducing selenium pollution from surface mines lies at the heart of this action, as do Patriot Coal's efforts in this endeavor.

## *II. The March 19, 2009 Consent Decree*

In the Consent Decree, the parties recite the procedural history of each action, including the resolution of various motions to dismiss and for summary judgment, and the impact of the case in the Circuit Court of Boone County. *See* Docs. 142 & 54. With regard to WV/NPDES Permit 1013599, the Consent Decree modified the Court's Orders granting Plaintiffs injunctive relief against Apogee, on May 27, 2008, July 7, 2008, August 13, 2008, and December 8, 2008, and ordered the company to comply with its effluent limitations for selenium on Outfalls 001, 002 and 003 of the permit no later than April 5, 2010. The Consent Decree also required Patriot Coal to: (1) conduct certain pilot treatment projects or supplemental environmental projects ("SEPs") related to selenium at a cost of no less than \$350,000;<sup>4</sup> (2) submit five status reports, on dates certain, evaluating the SEP and providing information on additional Patriot Coal efforts to control selenium pollution;<sup>5</sup> (3) provide Plaintiffs with copies of specified documents, including all discharge

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<sup>4</sup> The SEP had two parts: (1) the requirement that Patriot Coal undertake pilot projects at Outfall 002 on WV/NPDES Permit 1013599 and at one other Patriot Coal outfall, using New Logic Research, Inc.'s ("New Logic") Vibratory Shear Enhanced Process ("VSEP") membrane technology to attempt to treat selenium discharges; and (2) a "Concentrate Disposal Study and Report," analyzing treatment options and their costs for the disposal of concentrate from the VSEP system.

<sup>5</sup> Status reports were ordered to be submitted on June 15, 2009, September 15, 2009, December 15, 2009, March 15, 2010, and April 12, 2010. The other selenium control efforts reported in the status reports included: (1) the operational status of Patriot Coal's treatment equipment using zero-valent iron ("ZVI") in either a steel wool or steel foam format; (2) the

monitoring reports (“DMRs”) for WV/NPDES Permits 1013599, 0099392, 1016776, 1020889, and 1021028; and (4) pay civil penalties of \$50,000. *See id.* In exchange for the \$50,000 payment, Plaintiffs agreed to discharge Hobet and Apogee from liability for: (1) any prior violations of WV/NPDES Permits 1013599, 0099392, 1016776, 1020889, and 1021028; and (2) any violations of the permits’ selenium limits that may occur between the date of entry of the Consent Decree and April 4, 2010. *Id.*

In the Consent Decree, the parties explain that “[they] believe that settlement of Civil Action Numbers 3:07-cv-00413 and 3:08-cv-00088 is in the best interest of the parties and the public, and that the entry of this Decree is the most appropriate means of resolving Civil Action Numbers 3:07-cv-00413 and 3:08-cv-00088.” *Id.* at ¶ 16. Further, the parties provide that “[they] intend for [the] SEP to demonstrate the technical and economic feasibility of using VSEP membrane technology to treat selenium discharges from coal mining operations, an environmental benefit that is directly related to the allegations in Plaintiffs’ complaint. The SEP protects and reduces risk to public health and the environment by demonstrating a technology to treat an industry-wide problem in Appalachian coal mining.” *Id.* at ¶¶ 51 & 52.

### **Defendants’ Motion to Modify and Plaintiffs’ Motion for Contempt**

Apogee and Hobet admit that they are in violation of the effluent limits for selenium in their respective permits. At some point, it became clear to Apogee that it would not be able to meet its April 5, 2010 deadline for compliance. Accordingly, on February 26, 2010, approximately one month before Apogee was required to come into compliance with the effluent limits for selenium

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operational status of the ABMet pilot project being performed in conjunction with the consent decree in the Boone County action; and (3) the operational status of Patriot Coal’s reverse osmosis (“RO”) pilot projects.

in WV/NPDES Permit 1015399, the companies moved, pursuant to Federal Rule of Civil Procedure 60(b)(5), to modify the March 19, 2009 Consent Decree. The companies' motions sought to: (1) defer the submission of the status reports due on March 15, 2010, and April 12, 2010; (2) stay the implementation of applicable selenium limits as required by Paragraph 21.a of the Consent Decree; and (3) extend the deadline for compliance with selenium limits to July 2012. *See Docs. 149 & 61.* Defendants' primary argument for modification was that the factual circumstances underlying the Consent Decree had changed in a manner warranting relief. Specifically, Defendants argued that they had taken considerable efforts, in conformity with the SEP ordered in these actions and those required in the Boone County matter, to identify technology to capture and remove selenium from waste water discharges, with partial success. According to the companies, their lack of success occurred despite their good faith and diligence which, therefore, warrants the extension of the deadlines for selenium compliance. *Id.*; *see also Docs. 150 & 62.*

In a response filed on March 22, 2010, Plaintiffs opposed Defendants' motions. *See Docs. 154 & 66.* On April 18, 2010, Plaintiffs then moved for an order to show cause why Apogee should not be found in civil contempt for its failure to comply with the terms and conditions of the March 19, 2009 Consent Decree. *See Doc. 156.* Plaintiffs' arguments against modification and for contempt overlap. Plaintiffs argue that Defendant failed to faithfully attempt to meet its obligations under the court-ordered Consent Decree, because the companies have known (or should have known) about the existence of viable technologies to treat selenium as early as July 2008, yet failed to implement or study these technologies due to costs. Essentially, Plaintiffs argue that the companies dragged their feet with regard to investigating and implementing pilot projects on more promising treatment technologies because of cost. As a result, Plaintiffs contend that, despite the

companies' existing efforts to research and develop a treatment technology for selenium, Defendant should be held in contempt and the motions to modify denied because the companies did not faithfully or diligently try to meet the April 5, 2010 compliance deadline.

### **Standards of Review**

#### *I. Rule 60(b)(5) and Defendants' Motion to Modify*

"A consent decree no doubt embodies an agreement of the parties and thus in some respects is contractual in nature. But it is an agreement that the parties desire and expect will be reflected in, and be enforceable as, a judicial decree that is subject to the rules generally applicable to other judgments and decrees." *Rufo v. Inmates of Suffolk County Jail*, 502 U.S. 367, 378 (1992) (citing *Railway Employees v. Wright*, 364 U.S. 642, 650-51 (1961)). Rule 60(b)(5) provides for relief from a final judgment or order when "the judgment has been satisfied, released or discharged; it is based on an earlier judgment that has been released or vacated; or applying it prospectively is no longer equitable[.]" Fed. R. Civ. Pro. 60(b)(5). A motion to modify a consent decree is governed by the standard set out in *Rufo*. Modification may be appropriate when there is a significant change either in factual conditions or in law. *Rufo*, 364 U.S. at 384. For example, "modification may be warranted when changed factual circumstances make compliance substantially more onerous . . . or when enforcement of the decree without modification would be detrimental to the public interest." *Id.*; see also *Horne v. Flores*, 129 S.Ct. 2579, 2593 (2009) ("Rule 60(b)(5) may not be used to challenge the legal conclusions on which a prior judgment or order rests, but the Rule provides a means by which a party can ask a court to modify or vacate a judgment or order if 'a significant change either in factual conditions or in law' renders continued enforcement 'detrimental to the public interest.')" (quoting *Rufo*, 502 U.S. at 384).



However, where the events relied on as the basis for establishing a significant change were anticipated, a modification should not be granted. “If it is clear that a party anticipated changing conditions that would make performance of the decree more onerous but nevertheless agreed to the decree, that party would have to satisfy a heavy burden to convince a court that it agreed to the decree in good faith, made a reasonable effort to comply with the decree, and should be relieved of the undertaking under Rule 60(b).” *Rufo*, 502 U.S. at 385 (citations omitted). Additionally, according to *Horne*, “a critical question in [a] Rule 60(b)(5) inquiry is whether the objective of the [previous] order . . . has been achieved,” *Horne*, 129 S.Ct. at 2595, and the objective of the relevant federal law should be considered. *See id.* at 2597–2601, 2604, 2606. In this case, the primary federal law at issue is the CWA. The purpose of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). This goal is achieved, in large part, by 33 U.S.C. § 1311, which generally prohibits the “discharge of any pollutant by any person” into the waters of the United States. The primary exception to this prohibition is the National Pollution Discharge Elimination System (“NPDES”), found under 33 U.S.C. § 1342. Under NPDES, the U.S. Environmental Protection Agency (“EPA”) or authorized state agency can issue a permit for the discharge of any pollutant, provided that the discharge complies with the conditions of the CWA. 33 U.S.C. § 1342. It is compliance with this provision of the CWA that is under consideration in determining whether to grant the motion to modify the consent decree.

The party seeking modification of a consent decree bears the burden of showing the *Rufo* standard has been met. *Rufo*, 502 U.S. at 783; *Horne*, 129 S.Ct. at 2593. “If the moving party meets this standard, the court should [then] consider whether the proposed modification is suitably

tailored to the changed circumstance.” *Rufo*, 502 U.S. at 783. Further, “once a party carries [the *Rufo*] burden, a court abuses its discretion ‘when it refuses to modify an injunction or consent decree in light of such changes.’” *Horne*, 129 S.Ct. at 2593 (quoting *Agostini v. Felton*, 521 U.S. 203, 215 (1997)).

## II. Plaintiffs’ Motion for Contempt

In the Fourth Circuit, to establish civil contempt, the moving party must show each of the following elements by clear and convincing evidence:

(1) the existence of a valid decree of which the alleged contemnor had actual or constructive knowledge; (2) . . . that the decree was in the movant’s ‘favor’; (3) . . . that the alleged contemnor by its conduct violated the terms of the decree, and had knowledge (at least constructive) of such violations; and (4) . . . that [the] movant suffered harm as a result. *JTH Tax, Inc. v. H & R Block Eastern Tax Servs., Inc.*, 359 F.3d 699, 705 (4th Cir. 2004) (quoting *Ashcraft v. Conoco, Inc.*, 218 F.3d 288, 301 (4th Cir. 2000)) (internal citations omitted) (ellipses in original).

“A court may impose sanctions for civil contempt ‘to coerce obedience to a court order or to compensate the complainant for losses sustained as a result of the contumacy.’” *Cromer v. Kraft Foods N. Amer., Inc.*, 390 F.3d 812, 821 (4th Cir. 2004) (quoting *In re General Motors Corp.*, 61 F.3d 256, 258 (4th Cir. 1995)). “Civil contempt is an appropriate sanction if [the court] can point to an order of [the court] which ‘set[s] forth in specific detail an unequivocal command’ which a party has violated.” *In re General Motors*, 61 F.3d at 258 (quoting *Ferrell v. Pierce*, 785 F.2d 1372, 1378 (7th Cir. 1986)). Moreover, the remedy for civil contempt is within a court’s broad discretion. *See, e.g., JTH Tax*, 359 F.3d at 705.

In the instant case, Apogee’s ongoing violation of the effluent limits for selenium contained in WV/NPDES Permit 1013599 is sufficient to establish the harm necessary to show contempt. *See Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 157 (4th Cir. 2000)

(“Because these discharge restrictions are set at the level necessary to protect the designated uses of the receiving waterways, their violation necessarily means that these uses may be harmed.”). *See also Pub. Interest Group of N.J., Inc. v. Rice*, 774 F. Supp. 317, 328 (D.N.J. 1991) (“Defendant’s repeated discharge of pollutants at levels higher than the water quality based limitations contained in the permit harms the [waterway] by degrading the waterway and impairing its designated and existing uses.”), *cited in Gaston Copper*, 204 F.3d at 157; *Student Pub. Interest Research Group of N.J., Inc. v. Georgia-Pacific Corp.*, 615 F.Supp. 1419, 1424 (D.N.J. 1985) (“Congress has identified NPDES violations, however trifling, as injurious to persons such as plaintiffs’ members, who use bodies of water into which a permittee’s effluents flow.”). Further, this Court has found that repeated violations of permit limits for selenium is sufficient to establish irreparable injury for the purposes of injunctive relief. *Ohio Valley Envtl. Coalition, Inc. v. Apogee Coal Co.*, 555 F.Supp.2d 640, 648 (2008).

### **Analysis**

Defendants in their motions for modification of the Consent Decree specifically seek to stay the implementation of the applicable selenium limits as required by Paragraph 21.a and to extend the deadline to comply with those limits until July 2012. Defendants essentially argue that because no feasible technology to capture and remove selenium has been discovered by the Defendants through the SEPs ordered under the Consent Decree and pursuant to the DEP settlement and consent order modified on December 3, 2009, they are unable to achieve full compliance with the deadline set in Paragraph 21.a. *See* Doc. 150, at 4–5. Further, Defendants argue that the failure of the VSEP technology “to remove selenium reliably, consistently and to the level required to meet the effluent limits . . . constitutes the ‘significant change in circumstances’” warranting modification under the

*Rufo* standard. *See id.* at 5. Having presented a change in circumstances, the Defendants then proceed to argue that compliance with the Consent Decree as it currently exists is unachievable, and, therefore, more onerous, due to the unforeseen “lack of a developed technology or a system of treatment which can consistently, reliably and efficiently remove selenium discharged under all operating conditions at all of the Companies’ outlets.” *See id.* at 6. This argument fails to persuade the Court. The *Rufo* standard has not been met because, although recognizing the challenges it assumed under the Consent Decree, Defendant Apogee’s failure to use reasonable diligence substantially diminished its ability to achieve compliance. Instead, Apogee is found to be in contempt for failure to comply with the March 19, 2009 Consent Decree. In reaching this conclusion, the Court relies upon findings made from the evidence presented at the hearing on the motions and in consideration of the context of the pending motions within this litigation.

As recited in this Court’s Order of May 27, 2008 (Doc. 70), selenium limitations had been included in Apogee’s permit since 2006, although the effective date of the selenium limits was delayed first by DEP and later by this Court. This Court observed in that Order that Apogee had done next to nothing to comply even with the extended effective dates DEP unsuccessfully attempted to confer.<sup>6</sup> The Court then entertained Apogee’s request for more time to select and implement a treatment plan. On July 7, 2008, the Court granted Apogee additional time to engage a consultant, review treatment alternatives, and submit a plan for compliance, with the explicit expectation that a plan be submitted within six months. On August 13, 2008, the Court revisited the

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<sup>6</sup> DEP’s compliance order, which this Court found invalid, extended the compliance deadline and allowed Apogee to monitor and report selenium levels for 3 years, after which the limits would be effective. However, Apogee essentially rejected its obligation under that compliance order to submit a plan for treatment as the first step toward treatment. Instead, it took the position that the permit would expire before the selenium limits took effect.

deadlines, at Apogee's request, and discussed both the schedule for compliance and Apogee's choice, at that time, to pursue "zero valent iron" technology ("ZVI"). The Court extended the deadline for installing treatment to May 31, 2009, and compliance to June 30, 2009. The Court acquiesced to Apogee's use of ZVI at the Titanic outfall and simply required a status report the following month. In its subsequent status report, Apogee reported that it had retained CH2M Hill as a consultant to evaluate available technologies, oversee installation of a treatment system, and evaluate its performance. The report also identified pilot projects which were commencing, using reverse osmosis ("RO") and ABMet, and provided an update on the pilots using ZVI variations. Over the course of the next six months, despite Plaintiffs' first motion that Apogee be found in contempt, the Court accepted Apogee's efforts and took no action, giving Apogee an unfettered opportunity to choose its own path to compliance. The Court ignored Plaintiffs' objections when Plaintiffs pointed out the inability of the ZVI treatment to reduce selenium to compliance levels, at the either outfall 003 (Titanic) and later outfall 002 (Mudlick). Instead, the Court observed that Apogee had chosen its own course and relied on ZVI as its method of compliance. Order of Dec. 8, 2008, Doc. 129. By this point, Plaintiffs' expert Dr. Bell, Defendant's consultant, CH2M Hill, and even the ZVI vendors had recognized the problems with ZVI technology in this application.

With the May 31, 2009 deadline looming and against this backdrop, Apogee gained yet another reprieve when it negotiated the Consent Decree with Plaintiffs. The March 19, 2009 Consent Decree delayed compliance again and provided Apogee considerable flexibility to explore alternatives and choose its treatment system, including continued use of ZVI. This Consent Decree was entered into by Apogee at a time when CH2M Hill had provided several reports to Apogee with specific recommendations following its assessment of treatment alternatives and the steps which had

to be taken to choose and install a treatment system. The Court must assume that Apogee entered into the Consent Decree in good faith with confidence it could meet the deadline it was agreeing to. Unfortunately, Apogee could not, leading to the filing of the motions to modify and motion to find Defendant Apogee in contempt.

With this background, the Court conducted a hearing over three days to examine Apogee's efforts and rule on the pending motions. The Court heard testimony from Plaintiffs' experts, Defendant's key officials, and CH2M Hill's representatives, among others, to gather a full view of Apogee's progress. Certainly, Apogee has not failed all of its responsibilities; the evidence described pilot projects utilized by Apogee to evaluate treatment alternatives and the work performed by CH2M Hill to guide Apogee, with some useful results having been achieved. However, neither Apogee's degree of success nor diligence of effort meet its duty to comply with the Consent Decree.

Most striking to the Court is the company's failure to pursue with reasonable diligence the specific recommendations supplied by its own venerated consultant, CH2M Hill. Prior to entering into the Consent Decree with Plaintiffs, Apogee had been informed of several critical measures that needed to be undertaken to evaluate its options effectively. For reasons Apogee was unable to justify at the hearing, Apogee ignored some and delayed others for months. Finally, on the eve of the hearing and well past its deadline, Apogee has followed through sufficiently to conclude only the first major step and start with the second—it has evaluated treatment alternatives and now selected at least one which appears viable.

CH2M Hill submitted numerous reports to Apogee but two are particularly important here. First, CH2M Hill's Preliminary Watershed Flow Estimation, dated January, 2009, analyzed the

watershed where Apogee's three outfalls are located to determine, preliminarily, the amount of flow through these outfalls. *Jt. Ex. 4.* CH2M Hill advised Apogee to undertake equalization and diversion of flow to control the amount of flow coming into the treatment system. The amount of flow that any treatment system would have to handle is an essential factor in reviewing whether treatment alternatives could work. The consultant emphasized its conclusion that any treatment option would likely require "equalization of flows," meaning some system of collecting, retaining, and slowly releasing higher flows, for instance in periods of rainfall, in a controlled manner to avoid overloading or bypassing the treatment system. Equalization would allow for a smaller, thus less expensive, treatment system. Having a plan for equalization is a critical step in determining how much flow volume a treatment alternative would have to be capable of receiving.<sup>7</sup> One method of equalization suggested was the use of collection ponds, such as expanding sediment ponds already in use or constructing large impoundments. Similarly, diversion of flow during rainfall could reduce the volume of water to be treated. Clean water, from undisturbed areas, could be diverted away from the outfalls, significantly reducing the volume to be treated. In its Preliminary Watershed Flow Estimation, CH2M Hill treated equalization and diversion as integral to its analysis of alternatives and its ability to recommend a treatment system, stating "equalization basins will be necessary." *Id.* at 29. For Apogee, the message was clear—it should undertake the steps necessary to design an equalization system early in the process as the evaluation of alternatives proceeded.

This recommendation goes hand-in-hand with the direction CH2M Hill gave Apogee in the contemporaneous report, Selenium Conceptual Treatment Alternatives Evaluation ("Alternatives

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<sup>7</sup> "The sizing of the selenium treatment alternatives equipment and the scale of operations requirements . . . is directly related to the rate of stormwater (i.e., peak and average flow)." *Jt. Ex. 4*, at 5–6.

Evaluation”) given in final form to Apogee in January, 2009. Jt. Ex. 5. The Alternatives Evaluation also made specific recommendations to Apogee, several of which had already been suggested in the consultant’s earlier advice.<sup>8</sup> CH2M Hill proposed that Apogee install flow monitoring and sampling equipment “near-term”, pointing out that it was “crucial for properly sizing equalization capacity to manage storm flows and associated treatment systems.” *Id.* at 3, 36. The recommendation proposed an evaluation of the correlation between selenium levels and wet weather flows (a wastewater study), speculating that selenium levels may be diluted as run-off volume increases during precipitation. The report urged pilot testing of Fluidized Bed Reactor (“FBR”) technology, which it endorsed as offering “effective performance and overall cost” and a “more feasible choice” than the alternatives. *Id.* at 2. While the report questioned the viability of ZVI, it recommended continued evaluation, testing, and engineering to see if it could be used on a full scale basis.

Using these recommendations to evaluate Apogee’s compliance illustrates its lack of diligence. Apogee’s dalliance in pursuing matters directly under its control has prevented it from complying with the Consent Decree. Though CH2M Hill made it abundantly clear that determining the amount and variability of flow and addressing equalization of flow were fundamental to the consideration of alternatives, Apogee demonstrated inaction. First and foremost, Apogee failed to take the steps to determine flow rates and variability, and to develop plans for equalization, so that information could be used to evaluate the treatment alternatives. Despite this clear directive and persuasive explanation, Defendant failed to initiate actual stream measurements for months. Stream

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<sup>8</sup> In perhaps its first written recommendations, the consultant’s August 12, 2008 report pointed out that wastewater characterization was a prerequisite to evaluating treatment options. Flow rates, variability, and selenium speciation had to be determined to begin any analysis of treatment options. Jt. Ex. 17. Patriot did not undertake this study until recently.



monitoring takes months to reveal seasonal variations and the unpredictable timing of storms certain to come. Storm water analysis, examining the concentration of selenium during storms, could have been performed early on. These were steps to be taken early in the process. Yet, according to CH2M Hill, Defendant did not discuss these recommendations with its representatives until August 2009, well after the January 2009 reports were provided to Defendant, and apparently did not install monitoring equipment until well after that. When asked about plans for equalization, it can offer only excuses or a strained and circular rationale for doing very little.<sup>9</sup> Further, the wastewater study did not begin until this year.

Apogee tries to shift some blame for its inaction to DEP because it is uncertain how much capacity its treatment system must be designed to handle to satisfy the regulators. What Apogee wants is clear—prior approval or guidance from DEP as to how much flow it has to treat, implicitly answering whether higher flow rates that exceed the system's ability to treat may be allowed to bypass treatment without constituting a violation. Given the great variability of flow between dry conditions and expected rainfall, Apogee wanted approval to use a design capacity that would treat most of the flow, but not necessarily all of it when precipitation was heavier. Knowing whether the capacity of any treatment system had to be designed to capture base flow, average annual flow, or the higher flows associated with storm events is important since the design capacity will drive the actual cost of any of the treatment alternatives.<sup>10</sup>

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<sup>9</sup> Patriot's witness testified that it could not begin to design equalization before it determined the expected flow rates, which it had not undertaken, and received guidance from DEP, which it had done little to obtain.

<sup>10</sup> Base flow is the flow of water typical during dry weather, reached by calculating the historical average flow rates for the outfalls. Jt. Ex. 4, at 1–2. Annual stream flow volume is the base flow plus the annual average rain runoff flow. *Id.* at 1. Higher flows associated with storm

While Apogee's desire for this guidance was reasonable, its attempt to obtain this guidance was lackadaisical. Their representatives could only allude to having raised the matter in passing during conversations with DEP. They acknowledged that no formal request had been made, indeed not even a letter seeking guidance. They advise that, just before the hearing, they raised the matter with DEP, again informally, and were given only limited guidance. Now, Defendant acknowledges that DEP likely will require that treatment be designed to comply with the permit limits and that Defendant will have to design and install a system accordingly, capturing nearly all the flow if necessary to meet effluent limits. Having the wastewater study, if it indicates a dilution effect during storm runoff, could be a factor, but Defendant has yet to complete one.

The Court also concludes from the evidence that Apogee has consistently underestimated the flow rates and thereby failed to use reasonable judgment in estimating the size of treatment systems and its potential cost of compliance. The facts are uncontroverted. During 2009 Patriot received consultant reports from CH2M Hill and Potesta and Associates. Patriot Coal hired Potesta to develop estimates of Patriot's potential costs for treating selenium at the Magnum Coal properties acquired by Patriot, including the Apogee site. This information would be included in financial reports filed by Patriot. Potesta first offered estimates of the cost of treatment for seventy-two outlets with selenium problems by assuming that the treatment system at each outfall could be designed to treat 195 gallons per minute ("gpm"). Six months later, Potesta used a model that contemplated treating only twenty-four gpm at an outfall. Patriot's witness admitted these figures might cover only the base flow, which would not be realistic estimates of average or maximum

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events include those flows associated with 1-, 10-, 25-, and 100-year storms. *Id.*

flows rates.<sup>11</sup> As early as January 2009, CH2M Hill presented, as its best estimates of flow, average base flows for the three Apogee outfalls of 750, 250, and 40 gpm, and recommended design average flows at 1600, 400, and 105 gpm and design maximum flows (the greatest volume a treatment system could handle) of 4000, 800, and 350 gpm.<sup>12</sup> With equalization structures in place to retain large flows expected during some storms, a treatment system with this design maximum presumably would be sufficient to treat practically all of the flow volumes expected. In contrast, Potesta conducted a review of the Magnum outlets and used much lower flow rates for the average flow. These flow rates and assumptions cannot be reconciled with the findings made by CH2M Hill and provided to Patriot during the same time period. The flow estimates from CH2M Hill are magnitudes larger than the flow estimates used in the Potesta studies. The Potesta reports and associated emails show a dramatic (and possibly suspicious) change in the company's assessment of how many gallons per minute of discharge would be required to be treated to achieve compliance. This discrepancy arguably shows an intent to purposely underestimate the amount necessary to be treated, possibly indicating a lack of good faith in the attempt to comply.

To find Apogee in contempt, the Court is not required to conclude that Apogee acted with any deceptive intent, especially with regard to its corporate reporting of its financial standing. Thus, the Court does not reach any conclusion beyond this—the contradictory reports of flow rates, a primary factor in the cost of treating selenium discharge, evince Apogee's lack of focus and diligence in complying with the Consent Decree. If this defendant had used a good faith effort to

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<sup>11</sup> Mr. McHale was questioned about Plaintiffs' Exhibits 16, 58, 59, and 60—several Potesta reports and email exchanges which estimated Patriot's potential liability for treating selenium.

<sup>12</sup> See Table E1, on page 2, of the preliminary watershed flow estimates, Joint Exhibit 4.

comply, surely it would have carefully evaluated the conflicting flow estimates and recognized the necessity of conducting the recommended monitoring and studies. Then, it could have prepared a realistic and consistent estimate of flow rates, treatment volumes, and potential costs.

Another deficiency in Apogee's compliance is its unjustifiable, over-reliance on ZVI technology. Compared to the other treatment alternatives, Apogee has devoted more time, effort, and focus on ZVI despite relatively poor results. It seems that Apogee chose ZVI from the beginning and wore blinders throughout testing. After trying, with at least two different vendors, the original ZVI system and several modifications which resulted in failures, complications, and only inconsistent, limited success, Patriot nonetheless seems bound and determined to stick with ZVI at some of its outfalls. Even before the Consent Decree, Plaintiffs' experts and Defendant's own consultant pointed out the questionable efficacy of ZVI applied in this setting.<sup>13</sup> Then, and through the period since the Consent Decree, ZVI has not been demonstrated to perform consistently in reaching effluent limitations or in treating the expected flows. This Court made clear that Defendant would be accountable and bear the risk if ZVI technology failed to measure up. The caution expressed by CH2M Hill about ZVI in its January 2009 report was not taken seriously until after Defendant failed to meet the Consent Decree deadline and was nearly on the courthouse steps.

Patriot's consideration of alternatives to ZVI was marked with a lack of urgency, despite the Consent Decree deadlines. For instance, the ABMet pilot project was conducted in early 2009 and seemed to indicate the technology was viable. However, its representative, Mr. Rooney, testified that after the pilot was finished and ABMet had provided an estimate, months passed with little

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<sup>13</sup> The Alternatives Evaluation questioned whether the ZVI systems considered by Patriot could handle large flows and noted the lack of success in the field. Jt. Ex. 5, at 2, 6–7, 11–17.

response from Patriot. Likewise, after providing specific guidance in January, 2009, CH2M Hill did not hear from Patriot for several months. The January 2009 CH2M Hill reports recommended conducting an FBR pilot but no action was taken to implement such a pilot for months.

Patriot seemed fixated on ZVI technology and incapable of recognizing its flaws. Unlike the other alternatives listed by the Alternatives Evaluation, Apogee required no thorough evaluations of ZVI by an independent entity like CH2M Hill. Serious problems arose with ZVI systems requiring substantial alterations and producing results of limited value (inconsistently meeting selenium limits and treating only base flows). Apogee forged ahead with ZVI after the Consent Decree, ignoring the mixed results achieved despite modifying the systems and attempting to treat only the lowest expected flows. This devotion to ZVI has contributed to Apogee's failure to pursue the advice of its consultant. One reason cited by Apogee for delaying the FBR pilot and waiting to perform the flow and watershed studies was the time and resources it devoted to the ZVI projects. This is not persuasive; Apogee had significant forewarning of the limitations of the ZVI systems and the importance of the flow and watershed studies to future treatment evaluations.

In reaching the settlement with Plaintiffs embodied in the Consent Decree, Defendant agreed to install treatment at Apogee's three outfalls to comply with selenium limits by April 5, 2010. It failed to meet this preeminent goal. But that failure would not result in a finding of contempt and a denial of the motions to modify if Defendant had exercised good faith and reasonable diligence in the efforts to meet the goal. Instead, Defendant dug itself into a hole such that complying with the Consent Decree became impossible when it placed unwarranted reliance on ZVI technology and, delayed or ignored other measures suggested by its consultant. After agreeing in the Consent Decree to the April, 2010 deadline, Defendant could not afford to let months pass before it pursued

the recommendations of its consultant. Defendant is only now able to do what should have been done a year or more ago. Had Defendant acted with diligence, it would have been able to fairly evaluate the alternatives, select a treatment method, and have in place by now a schedule for installing treatment designed to bring it into compliance. This is more than sufficient to conclude that Defendant has failed to meet the burden under *Rufo*; there is no significant change in the factual conditions, only the Defendant's failure to diligently undertake its obligations pursuant to the Consent Decree. Further, the Court finds that this lack of effort, and not simply the failure to meet the deadlines, compels the conclusion that Defendant Apogee is in contempt.<sup>14</sup>

### Conclusion

For the foregoing reasons, the Court **DENIES** Defendant Apogee's Motion to Modify and **GRANTS** Plaintiffs' Motion for Contempt; Defendant Hobet's Motion to Modify is **DENIED** as moot. Separate orders have been entered contemporaneously regarding specific relief to be granted. The Court **DIRECTS** the Clerk to send a copy of this Memorandum Opinion and Order to counsel of record and any unrepresented parties.

ENTER:           October 8 , 2010



ROBERT C. CHAMBERS  
UNITED STATES DISTRICT JUDGE

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<sup>14</sup> Even though Defendant's motion for modification is denied, the relief it sought does not vary greatly from the measures that this Court is ordering. Defendant requested a two and one-half year extension of the deadline for compliance, discretion to choose the treatment system, and appointment of a special master.